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AUTHOR Holderegger, John; Fortune, Jon; Fortune, Barbara
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ABSTRACT

This report describes the activities and outcomes of a pioneering Telehealth project in which clinical psychologists use state of the art satellite technology to consult with paraprofessionals who live and provide treatment settings to persons with the dual diagnosis of developmental disabilities and mental illnesses. The goal is to provide early intervention to individuals who have psychiatric and behavioral troubles before they escalate to the level of needing acute hospitalization. The project began with support for 56 people who had lived an average of 14 years in the Wyoming State Hospital. This 5-year project has been able to avoid psychiatric hospitalization for the 90 subjects in this project. This success has saved thousands of dollars and assured a quality, integrated life for individuals with severe disabilities by supporting them in their communities. The report concludes that compressed video technology provides an excellent venue at a reasonable cost in a rural state such as Wyoming, to get quality training to the worker in the field on subjects that are individualized and interactive. The program found that the technology provides a cost-, time-, and travel-effective way to bridge the gap of distance and inclement weather in the rural state. (Contains 17 references.) (CR)

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Telehealth in Profoundly Rural America

Garry L. McKee, Ph.D., M.P.H., Director

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Additional information and copies may be obtained from:
Jon Fortune, Ed.D.
Adult Services Manager
Wyoming Developmental Disabilities Division
Herschler Building, First Floor West
122 West 25th Street
Cheyenne, WY 82002
(307) 777-7115
(307) 777-6047 (Fax)
e-mail: jfortu@state.wy.us

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BRIDGING THE GAP: Telehealth in Profoundly Rural America

John Holderegger
Mountain Regional Services, Inc.
Evanston, Wyoming

Jon Fortune
Wyoming Developmental Disabilities Division
Cheyenne, Wyoming

Barbara Fortune
University of Wyoming, Wyoming Practice Residency
Cheyenne, Wyoming

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Bridging the Gap: Telehealth in Profoundly Rural America

Holderegger J* Mountain Regional Services, Inc. Evanston, Fortune J* Wyoming Health Department, Developmental Disabilities Division, and Fortune B* University of Wyoming, Family Practice Clinic, Cheyenne, Wyoming, USA

This is a pioneering telehealth project in which clinical psychologists use state of the art satellite technology to consult with paraprofessionals who live and provide treatment settings to persons with the dual diagnosis of developmental disabilities and mental illness. The goal is to provide early intervention to these individuals who have psychiatric and behavioral troubles before they escalate to the level of needing acute hospitalization. The project began with support for 56 people who had lived, an average of 14 years, in the Wyoming State Hospital. This five-year project has been able to avoid psychiatric hospitalizations for the 90 subjects in this project. This success has saved thousands of dollars and assured a quality, integrated life for these persons with severe disabilities by supporting them in their home communities. The cost of travel, per diem and personnel would have been ten times the cost of the video teleconferencing. The use of this technology provides for a cost, time, and travel effective way to bridge the gap of distance and weather.

One of the greatest challenges in frontier states such as Wyoming is serving persons with severe needs in very rural settings. To provide a context of the demographic, social, economic and cultural landscape of Wyoming, we will explore summary level data from the 1990 United States Census Database. The 1990 population base for Wyoming is reported fewer than one-half million, specifically 453,588 persons. Wyoming is the least populated state in America with the overwhelming majority of the state's population living in rural and frontier areas. To meet the demands of these people with severe needs a telehealth project was developed. Telehealth can be defined as: the use of telecommunications technologies to provide health information and services. A pioneering telehealth project was developed in which specialists, (in this case psychologists,) utilize state of the art satellite technology to consult with professionals and paraprofessionals who live and provide treatment in very rural settings to persons with the dual diagnosis of developmental disabilities and mental illness.

The goal of this ongoing project is to provide early intervention to these individuals with a developmental disability who also have psychiatric and behavioral troubles before they escalate to the level of needing acute hospitalization. Utilization of the State of Wyoming Compressed Video Network along with highly trained psychologists to provide such interventions have made it possible for all of the persons with a developmental disability and a co-occurring mental illness to avoid hospitalization. This alone has saved thousands of dollars and most importantly assured a quality-integrated life for these persons with severe disabilities, allowing them to remain in their home communities.

This telehealth project has gone one step farther, providing monthly statewide training for all of the involved compressed video sites on such important issues as active treatment and psychopathology. In a frontier state such as Wyoming, getting quality training to the worker in the field on subjects that are individualized and interactive is very difficult and expensive. Compressed video technology provides an excellent venue at a reasonable cost. The technology provides for an effective way to "bridge the gap" of distance and avoids possible delays due to inclement weather known to Wyoming during much of the year. There is an increasing interest in the use of telehealth as a means of healthcare delivery. This is partly because technological advances have made the equipment less expensive and simpler to use. Along with this, increasing healthcare costs and patient expectations have increased the need to find alternative modes of healthcare delivery.

There are several factors that make Wyoming the optimum environment to utilize telehealth in general and more specifically to serve persons who have mental health needs. In rural Wyoming there is often a scarcity of resources for those seeking services from a mental health professional and large distances between psychological delivery sources (Butz & Recor, 1994). In most small towns there are no mental health professionals to deliver services. Driving distances along with inclement weather combine with the mental health stigma in western society to make seeking such services prohibitive. Telehealth allows these services to be delivered to the persons in need in their own community by providing training to the local staff who can better meet the needs of the persons served. Few providers in rural areas (usually generalists), large distances between providers, minimal knowledge of persons with developmental disabilities who have a co-

occurring mental illness, treacherous winters, and expensive and difficult air travel call for creative solutions for service provision in Wyoming.

When the telehealth project began, there were only nine providers who were serving 670 individuals; only two of those providers employed full-time psychologists to provide treatment to persons with a developmental disability who also had a co-occurring mental illness. Today there are over 400 providers of services to approximately 800 adults with a developmental disability. Still, only two of these providers have psychologists on staff while a few others subcontract for psychological services from psychologists who are not specialized in treating persons with co-occurring disorders.

The State of Wyoming was faced with the dilemma of how to expand the resources employed at one of the community programs where a very cost effective yet therapeutically effective program was in place. Mountain Regional Services (MRSI) was asked by the adult program manager of the Wyoming Division of Developmental Disabilities to explore methods of providing consultation services at community programs where there were no psychological services offered.

MRSI's President and CEO had already had experience with the utilization of Wyoming's Compressed Video Network. He suggested that the available time slots in the early morning hours, before college classes, could be utilized to provide consulting services via the University of Wyoming Teleconferencing network. MRSI psychologists began to provide consultation via teleconferencing to the Regional Service Providers of

Wyoming serving 670 persons with a developmental disability. A dual prong approach was taken which included person-centered case consultation and consultee-centered consultation which provides education on selected topics that are pertinent to serving individuals with developmental disabilities across Wyoming.

In the person-centered case consultation, a consultee encounters problems with a specific person that they are serving, and the goal of the consultant is to study the specific problems, provide a diagnosis, and recommend treatment. In the consultee-centered case consultation the consultant focuses on the consultee and provides assistance with the difficulty of the consultee in performing his or her work role with the persons served. This difficulty might be inadequacies due to a lack of knowledge, lack of skills, lack of objectivity, or lack of confidence.- the staff member has the knowledge, skills, and objectivity but lacks confidence in his/her ability to carry out what is known.

Prior to the provision of person-centered case consultation, providers are asked to contribute the following information for use by the psychologist to prepare for the consultation: age, level of intellectual functioning, DSM-IV diagnoses, developmental history, history of institutionalizations, history/nature of physical or sexual abuse, normal daily routine, nature/quality of relationships with staff and peers (including differences if they exist), who is currently involved in the persons served daily routine, recent changes in the environment, current medication and any recent medication changes, types of behavior problems (antecedents and consequences of those behaviors), what has been attempted to manage the behaviors and what was the outcome of each of the attempts, and a psychological evaluation (if available).

At the time of the actual 2-hour consultation, all team members are asked to be present at the site. More specific data about the person receiving services could be elicited from the various team members. Then, a conceptualization of the person receiving services's problems and treatment recommendations are provided. It is possible for follow-up consultations to occur if there was not complete symptom remission or adequate improvement in behavior. Often, a second consultation provides the information necessary to fine-tune the treatment.

Consultee-centered sessions provide to all of the compressed video sites simultaneously focus on providing the training in areas necessary to treat the persons with developmental disabilities effectively. Issues of confidentiality associated with the person-centered case consultation do not have to be addressed, as no specific cases are discussed.

Individuals present at the sites for the consultation or education were asked to complete a one-page evaluation form following the consultation. The results were that the helpfulness of the consultation services via teleconferencing between the ratings of "probably helpful" and "definitely helpful" (Mean = 4.6; with definitely helpful as 5; probably helpful as 4; neutral as 3; probably not helpful as 2; and definitely not helpful as 1) Consultees identified the following areas as contributing to their perception of helpfulness: receiving factual information (e.g., what is psychosis?); receiving specific recommendations (e.g., how do I reduce the aggressive behavior in this client?); interacting with the consultant and their own teammates (e.g., group discussion and problem-solving); interpersonal qualities of the consultant (e.g., interesting, keen observer,

understanding, open to question, good listener) 5) receiving an alternative viewpoint (e.g., a different way to look at or understand the reasons for the client's behavior); getting feedback on their current practices or case conceptualization (e.g., we were giving consequences to an already self-punitive person, and we needed to be giving more praise); the structuring of the consultation services (e.g., thorough, systematic, used examples, provided a focus, simplified the issues); the specific benefits provided by the teleconferencing medium (e.g., visual contact, immediate transfer of information, cost effectiveness).(Faulkner & Faulkner 1998).

In addition to the positive feedback from the providers who received the services, individuals involved in administering the Division of Developmental Disabilities (DDD) for the state of Wyoming provided positive feedback. None of the persons with a developmental disability served by the DDD had returned to the state hospital and only 1% had returned to the state training school, usually for overall medical concerns. In most other states, the recidivism rates are much higher, in the range of about 5 to 15% or more. The Wyoming recidivism rate has dropped to its current low over the last few years with the decline attributed to the combination of the teleconferencing services and the comprehensive evaluation services provided by Mountain Regional Services, Inc. The cost effectiveness of the consulting by teleconferencing is manifested by the progressive number of decreased consultations since the inception of the service in August 1995; for individuals demonstrating intransigent behaviors which have not improved or for individuals emerging as diagnostic enigmas difficult to discern with the teleconferencing consultation services, a comprehensive, in

person evaluation/consultation has also been available for providers of services of the persons with a developmental disability in the state (and probably accounts for some of the reduction in the number of psychiatric hospitalizations as well). Data collection from both the recipients of the consulting services and Wyoming state officials suggests that consultation via teleconferencing has had a beneficial effect in the state of Wyoming.

Telehealth has met our goal of providing early intervention to individuals with a developmental disability who also have psychiatric and behavioral distress before they escalate to the level of needing acute hospitalization. By utilizing the Wyoming State compressed video network with highly trained psychologists such interventions have been made avoiding hospitalizations for all persons served in Wyoming. Because of the success of this project, thousands of dollars have been saved and a quality integrated life assured for these persons with severe disabilities allowing them to remain in their home communities.

This telehealth project has gone one step further, providing monthly statewide training for all locations on such important issues as active treatment and psychopathology. Compressed video technology provides an excellent venue at a reasonable cost in a Frontier state such as Wyoming, to get quality training to the worker in the field on subjects that are individualized and interactive. We have found that the technology provides for a cost, time and travel effective way to "bridge the gap" of distance and inclement weather in our rural state.

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